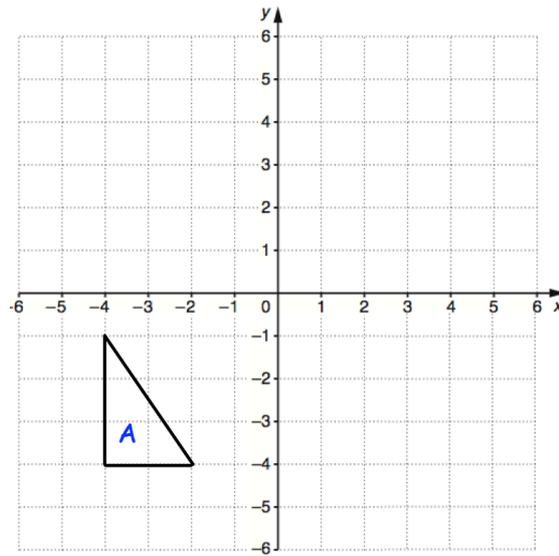


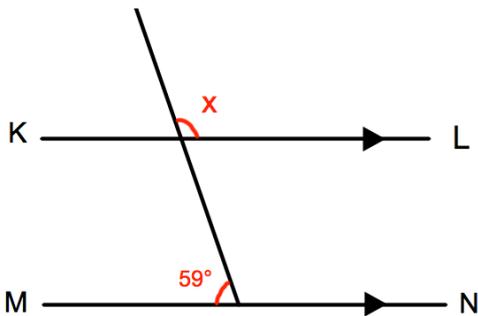
8th September



Corbettmaths



Reflect triangle A in the x - axis

Find the value of $5y + 3w$ when $y = 2$ and $w = 38$ Find the value of $5y + 3w$ when $y = 6$ and $w = -4$ 

Find the size of angle x

Make m the subject

$$s = \frac{hm}{4}$$

9th September



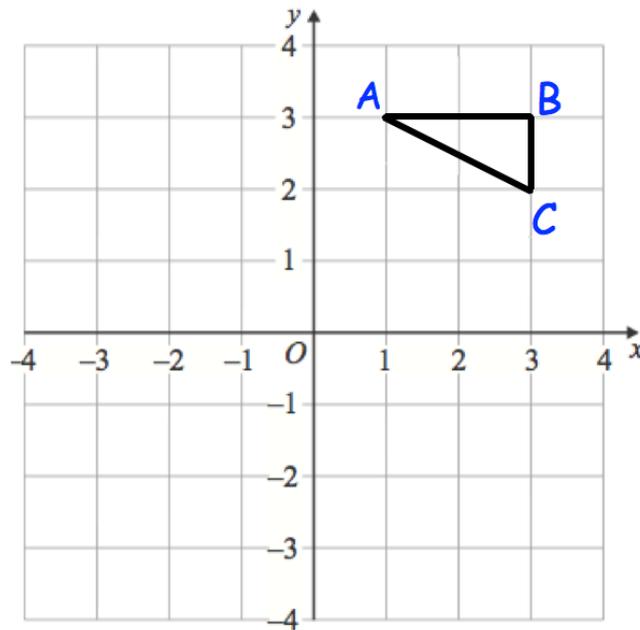
Corbettmaths

Simplify

$$4a + a$$

Simplify

$$5a + 2c + 4a - c$$



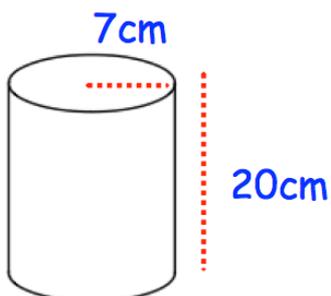
Rotate triangle ABC 90° anticlockwise about centre $(0, 0)$

The price of a TV is £260
In a sale the price is decreased by 20%

Work out the price of the TV in the sale.

The number of TVs sold increased from 70 to 98

Work out the percentage increase.

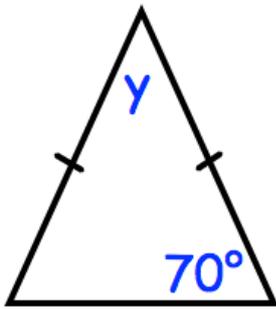


Find the volume of the cylinder.

15th September



Corbettmaths



Find the size of y .

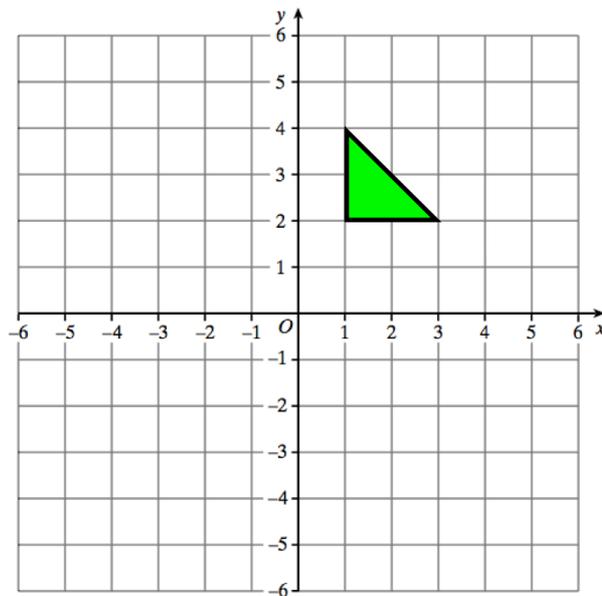
What type of triangle is shown?

Simplify

$2 \times 4y$

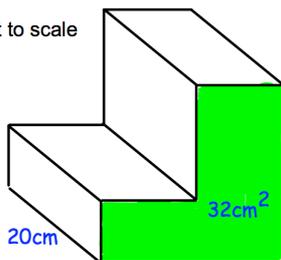
Simplify

$a \times a \times a$



Reflect the triangle in the y -axis
Label the new triangle B.

Not to scale



The cross-sectional area is 32cm^2 .
Work out the volume of the prism.

16th September

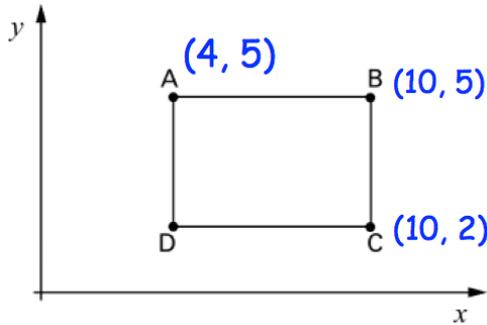
Corbettmaths



Write two numbers on the cards that:
Add to give 12.
Multiply to give 32.



Write two numbers on the cards that:
Add to give 0.
Multiply to give -16.



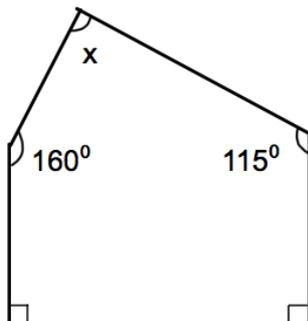
What are the coordinates of D?

E is halfway between the coordinates A and B.

Write down the coordinates of E.

$$\frac{5}{6} - \frac{1}{2}$$

$$\frac{2}{3} \div \frac{8}{11}$$



Find x

22nd September	
List the first five prime numbers.	 Corbettmaths List the first five cube numbers.
F H M Which letter has no lines of symmetry?	Which letter has order of rotational symmetry 2?
Solve $w + 8 = 20$	Solve $2x + 1 = 41$
Hannah is recording the number of letters in each word in an article. These are the first ten lengths. 3 4 5 6 2 4 3 7 3 6	Work out the median.
Calculate the mean.	The 11 th word has 4 letters. Tick the box which describes what affect this will have on the mean. The mean will decrease The mean will remain the same The mean will increase <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

23rd September

Corbettmaths

Patterns are made of sticks



Pattern 1



Pattern 2



Pattern 3



Pattern 4

Complete the table for Pattern 4.

Pattern Number	1	2	3	4
Number of Sticks	6	9	12	

$$\frac{1}{3} \text{ of } 30 = \frac{2}{3} \text{ of } \dots\dots\dots$$

Expand $3(2y - 1)$

Simplify

$$w^3 \times w^{-5}$$

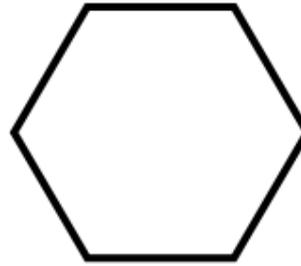
In 2000 the population of a country was 4,580,000
 By 2015, the population had increased by 18%

Work out the population in 2015

29th September

Corbettmaths

Draw all lines of symmetry on the regular hexagon.



What is the order of rotational symmetry of the regular hexagon?

Draw a shape with order of rotational symmetry 1.

Show that when you multiply two **consecutive** numbers that the answer is always even.

Try three different examples.

80 students visited the library over three days.

The two-way table shows some information about these students.

Complete the two-way table.

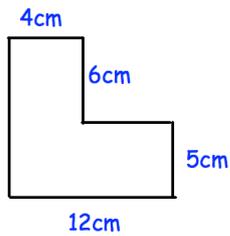
	Monday	Tuesday	Wednesday	Total
Female			13	38
Male	14			
Total		33	26	80

Simplify

$$\frac{w^6}{w^4}$$

30th September

Corbettmaths



What is the perimeter of the shape?

What is 7.5314 to two decimal places?

There are 400 students in a student.
126 are male.

What percentage of the students are female?

Is time taken to complete a marathon discrete or continuous data?

Tick a box.

Discrete Continuous

Give a reason for your answer.

Factorise

$$4a + 12$$

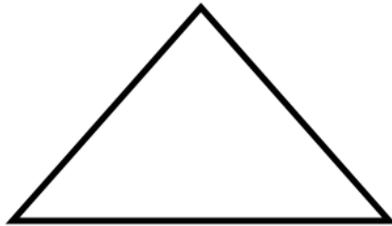
6th October

Corbettmaths

 -7°C -4°C 2°C 12°C -3°C

What is the difference between the coldest and warmest temperature?

The shape below **are drawn accurately**



Does the rectangle or the triangle have the largest perimeter?

Does the rectangle or the triangle have the largest area?

Don says

“the difference between two consecutive cube numbers is always odd.”

Is Don correct?
You must show your workings.

Simplify

$$y^8 \times y^{-2}$$

Simplify

$$2ay \times 4a$$

7th October



Corbettmaths

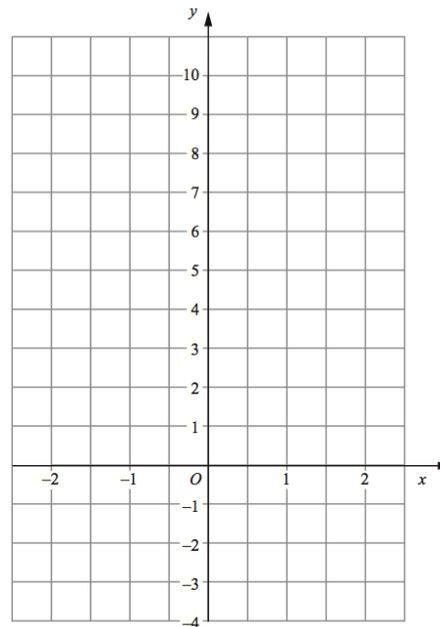
Decrease 18000 by 7%



Holly works out the answer to $135.66 + 193.88$ on a calculator. Round her answer to one decimal place.

Complete the table of values for $y = 2x + 1$

x	-1	0	1	2
y				



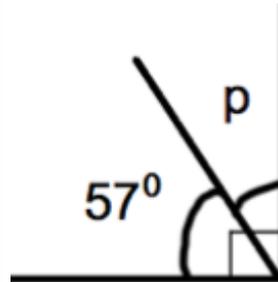
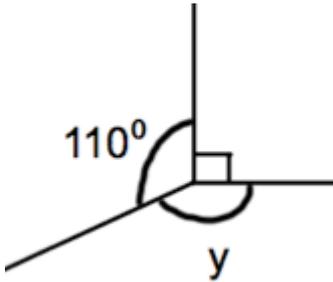
Draw the graph of $y = 2x + 1$.

Factorise

$$y^2 - 6y$$

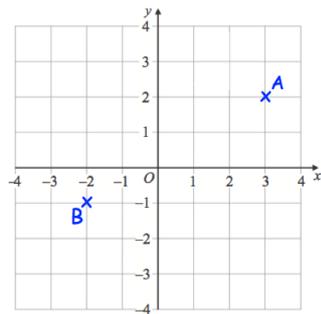
13th October

Corbettmaths



Julie is making some curtains.
She has \$100 to spend.
The material costs \$14 per metre
and she needs 8 metres.

Can Julie afford the material

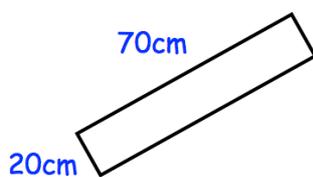


Write down the coordinates of A

Write down the coordinates of B

Mrs Jenkins had 284 Christmas cards
to post.
She posted 39 on Monday.
She posted 129 on Tuesday.
How many Christmas cards does she
have left to post?

Find the area of the rectangle



14th October



Corbettmaths

input

8



- 11



output

?

input

?



- 2

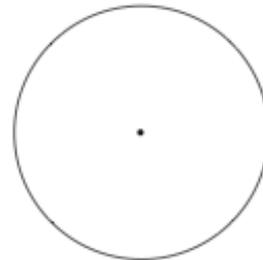


output

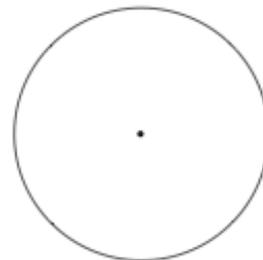
- 5

James has 86 marbles and Hannah has 95 marbles. How many marbles do they have altogether?

Draw a diameter on the circle



Draw an arc on the circle



A football team gets 3 points for a win, 1 point for a draw and 0 points for a loss.

Southampton have played 8 matches and have 11 points.

Write down a way that Southampton could have been given 11 points.

Number of wins _____

Number of draws _____

Number of losses _____

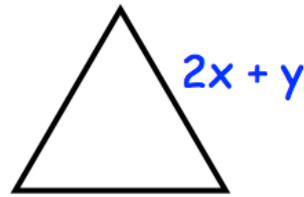
20th October



Corbettmaths

Shown is an equilateral triangle.
Each side is $2x + y$

Find an expression for the perimeter of the triangle.

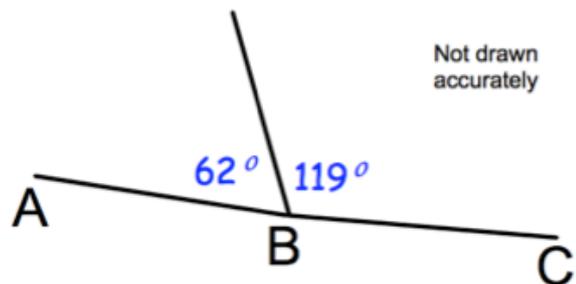


Fiona is playing a game.
She throws 8 balls at a target, one at a time.
Each hit is worth 5 points.
Each miss is worth -4 points.
Fiona hits the target with 2 of the balls and misses with the rest.



How many points does Fiona score?

Is AC a straight line?



Day	Monday	Tuesday	Wednesday	Thursday	Friday
Temperature	-4	1	-6	1	-2

What is the range of the temperatures?

What is the mean of the temperatures recorded?

The ratio of girls to boys in a class is $2 : 3$

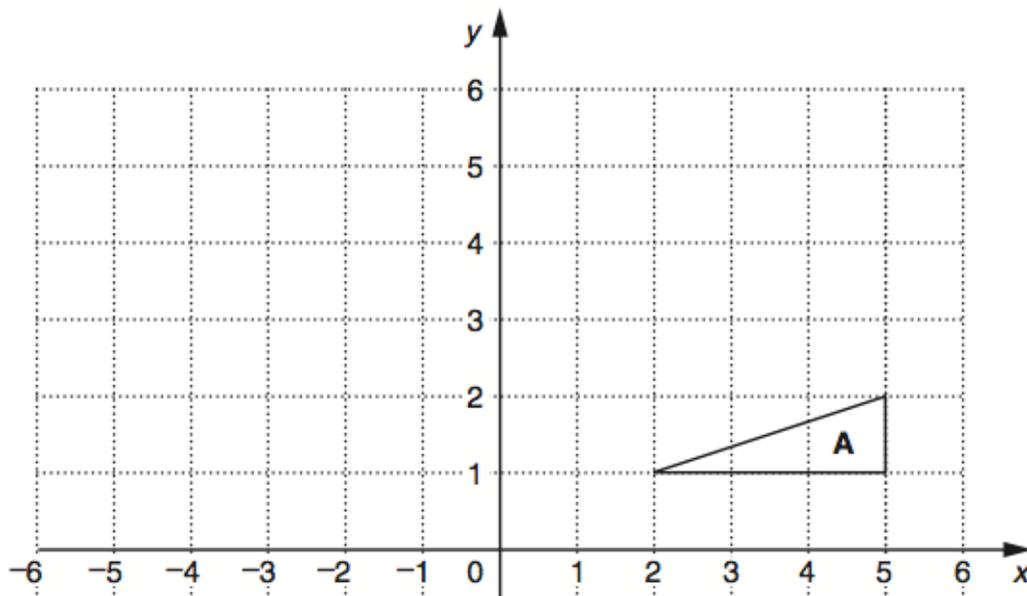
What fraction of the class are girls?

What percentage of the class are boys?

21st October



Corbettmaths

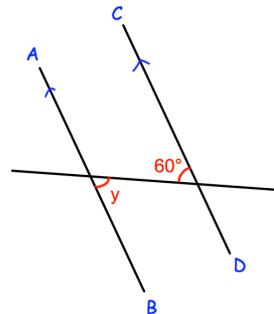


Reflect A in the y-axis

$$\frac{4}{5} \times \frac{9}{10}$$

$$\frac{2}{17} \div \frac{2}{5}$$

Work out the size of the angle marked y .
Give a reason for your answer.



The ratio of boys to girls in a school is
 $4 : 5$

There are 240 boys in the school.
How many students attend the school?

27th October



Corbettmaths

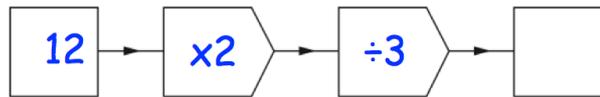
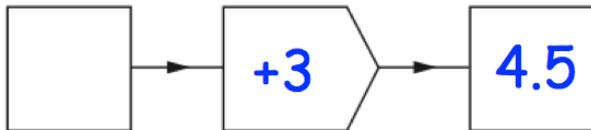
4 5 5 5 6 6 7 8 9 9

Find the range.

Write down the mode.

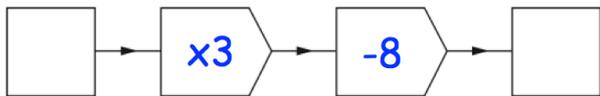
Find the median.

$$3^4$$



The input is the same as the output.

Find the input.

Expand $2(3w - 5y)$ Expand $2w(3w^2 - 5)$

28th October	
<p>William is y years old.</p> <p>Eoin is four years older than William.</p> <p>Write an expression for Eoin's age.</p>	 Corbettmaths
<p>Three consecutive numbers have a sum of 21.</p> <p>What are the three numbers?</p>	
<p>3 9 11 33</p> <p>Find the range.</p>	<p>Find the median.</p>
<p>James drives 164km.</p> <p>It takes 2 hours 30 minutes.</p> <p>Work out his speed.</p>	
<p>Write down the nth term for this sequence</p> <p>11 8 5 2 </p>	

Name: _____

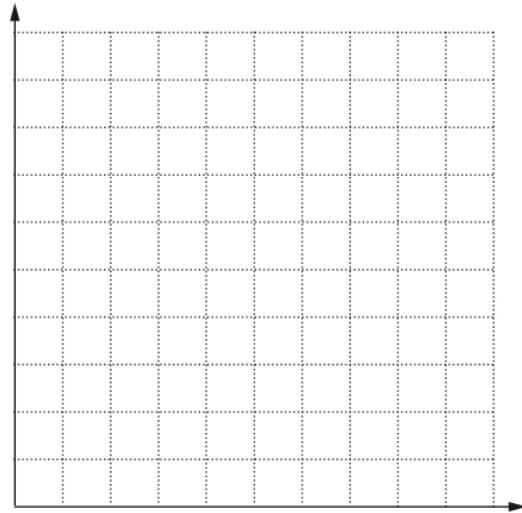
November 3

5-a-day

Foundation

Draw a frequency polygon for:

Age	Frequency
$0 < x \leq 10$	3
$10 < x \leq 20$	8
$20 < x \leq 30$	6
$30 < x \leq 40$	4



Write down the modal interval.

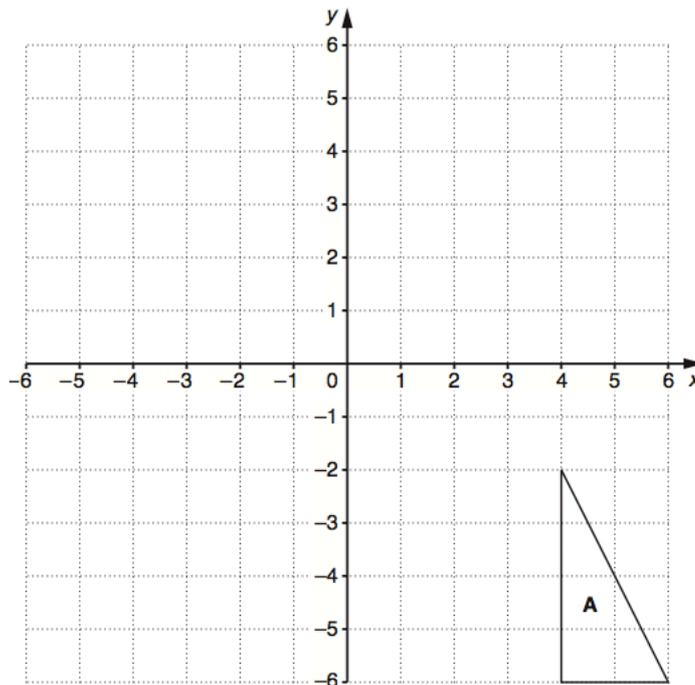
Rotate triangle **A** by 90° anticlockwise.

Label the image **B**.

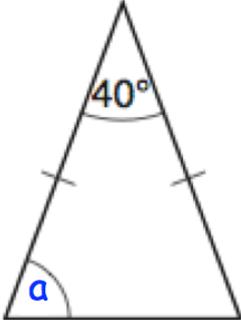
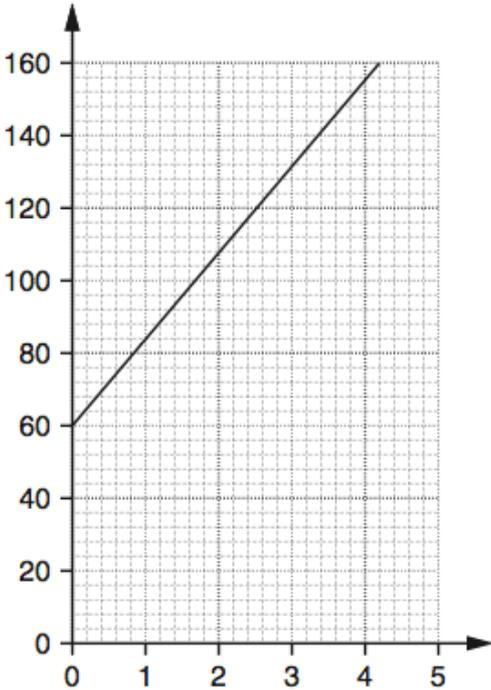
Translate triangle **A** by

$$\begin{pmatrix} -8 \\ 4 \end{pmatrix}$$

Label the image **C**.



Name: _____

November 4	5-a-day	Foundation
<p>Simplify</p> $4w \times 2w$	<p>Simplify</p> $2a \times 3c \times a$	
	<p>Find a</p>	
<p>Factorise</p> $8a + 10ac$	<p>Multiply out</p> $7(3w - 9)$	
<p>Write down the y-intercept.</p>		
<p>Write down the equation of the line</p>		

Name: _____

November 10

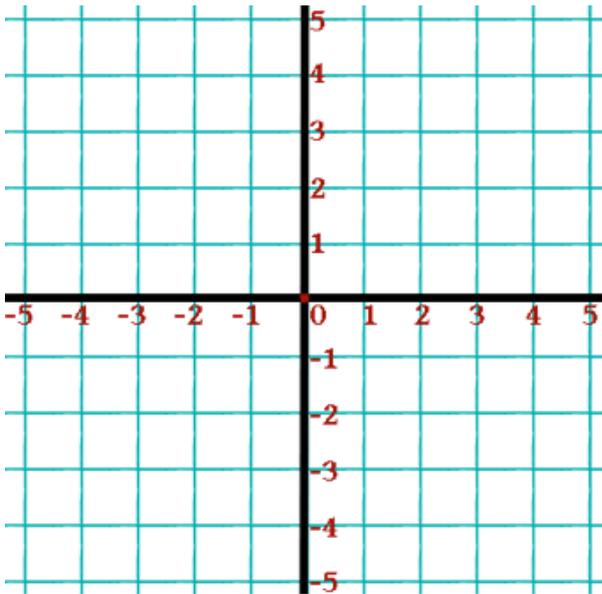
5-a-day

Foundation

Solve $5y - 4 = 21$

Make w the subject of

$$y = 3w + a$$



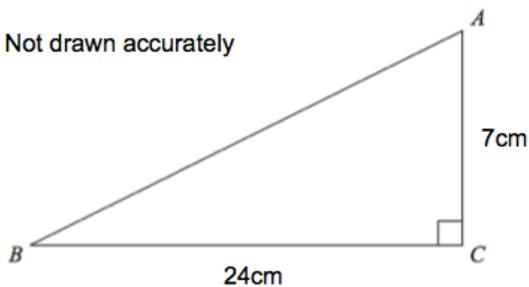
Draw $x = 4$

Draw $y = -2$

Complete the table and draw the line $x + y = 1$

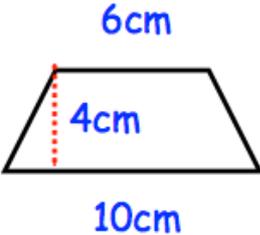
x	-2	-1	0	1	2
y					

Not drawn accurately



Calculate the length of AB

Name: _____

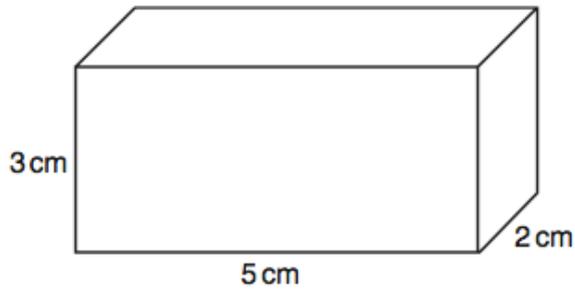
November 11	5-a-day	Foundation								
<p>Jose has some counters.</p> <p>20% are red. ½ are green. The rest are blue.</p> <p>There are 36 blue counters. How many green counters are there?</p>										
<p>Make u the subject of</p> $v = u + 3t$										
<p>3kg of tomatoes is £4.80</p> <p>How much does 7kg cost?</p>										
<table border="1" data-bbox="178 1350 767 1469"><tr><td>Pattern number</td><td>1</td><td>2</td><td>3</td></tr><tr><td>Number of sticks</td><td>7</td><td>12</td><td>17</td></tr></table> <p>How many sticks are in Pattern number 4?</p>	Pattern number	1	2	3	Number of sticks	7	12	17	<p>How many sticks are in Pattern 6?</p> <p>Write an expression for the number of sticks in Pattern number n.</p>	
Pattern number	1	2	3							
Number of sticks	7	12	17							
	<p>Calculate the area of the trapezium</p>									

Name: _____

November 17

5-a-day

Foundation



Calculate the surface area.

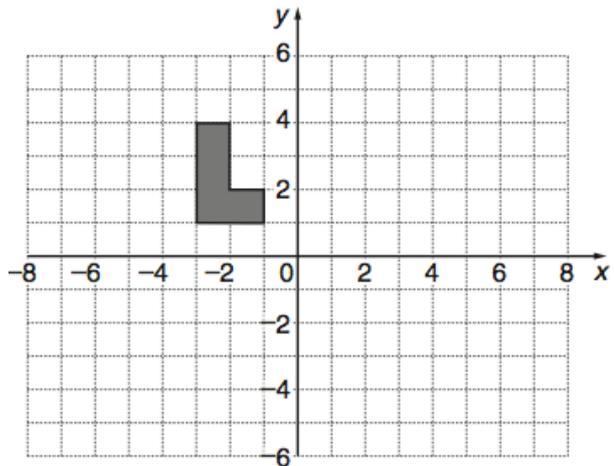
Simplify

$$a^6 \times a^2$$

Simplify

$$a^8 \div a^4$$

Reflect the shaded shape in the line $x = 2$



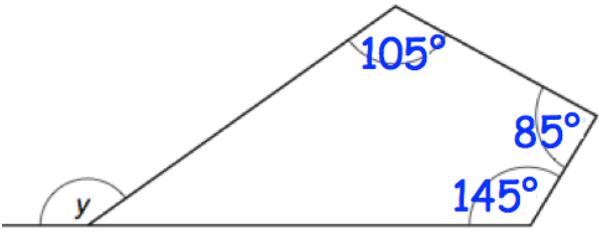
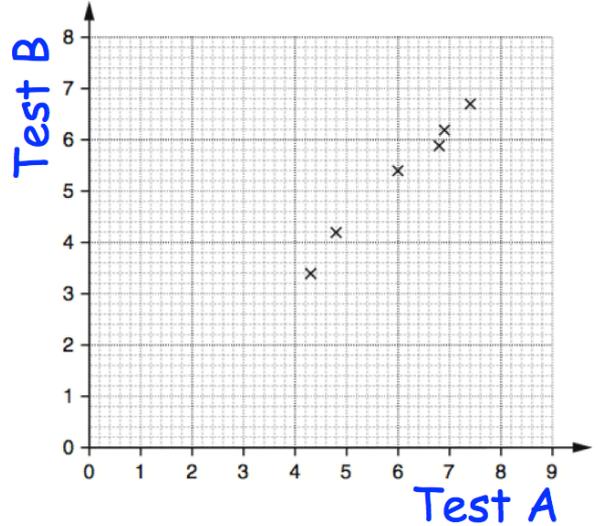
Translate the shaded shape by

$$\begin{pmatrix} -2 \\ -4 \end{pmatrix}$$

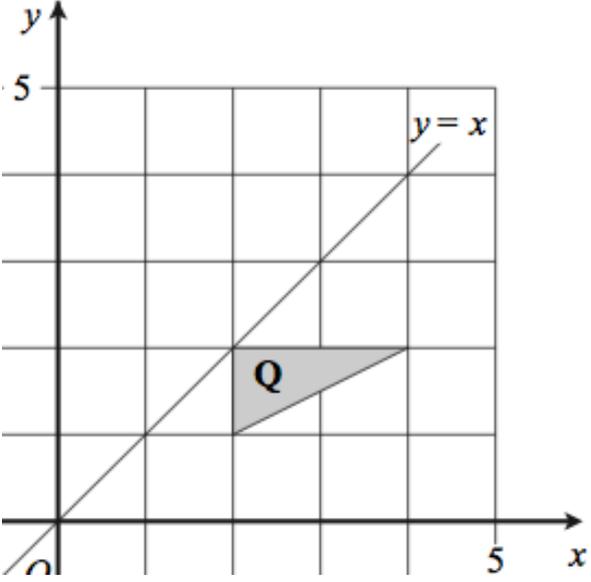
Points	Frequency
4	8
5	2
6	3
7	2

Work out the mean.

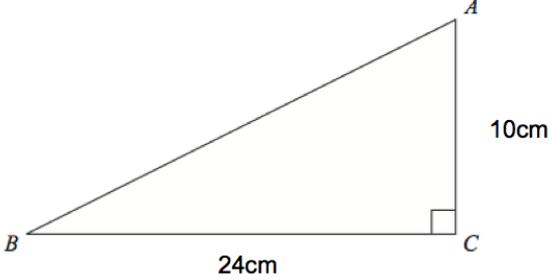
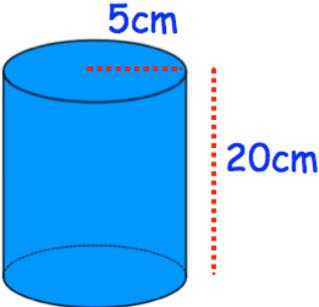
Name: _____

November 18	5-a-day	Foundation
	Find y .	
What is the reciprocal of 0.8?	$\frac{3}{7} \div 0.8$	
	Martin scored 7 in Test A and 5 in Test B. Plot this point.	
Draw a line of best fit.	David only sat Test A. He scored 5.5 Use your line of best fit to predict his score in Test B.	

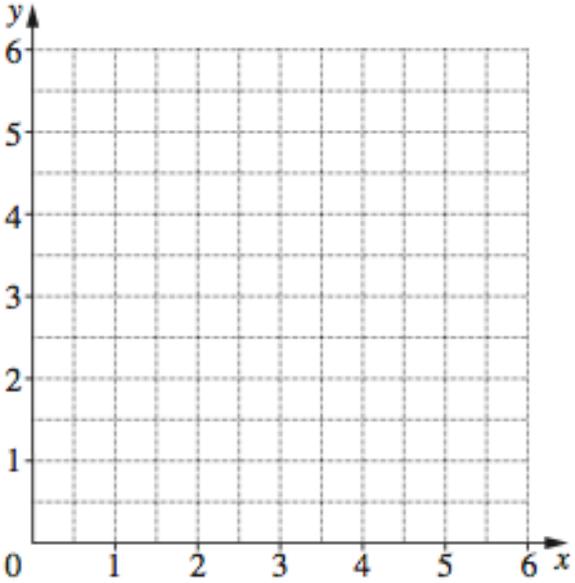
Name: _____

November 24	5-a-day	Foundation						
<p>The nth term of a sequence is</p> $7n + 1$ <p>Work out the first 5 terms</p>								
<p>Solve</p> $4w + 3 = 2w + 19$								
<p>Calculate the mean</p> <p>Age Frequency</p> <table><tbody><tr><td>9</td><td>3</td></tr><tr><td>10</td><td>2</td></tr><tr><td>11</td><td>5</td></tr></tbody></table>	9	3	10	2	11	5		
9	3							
10	2							
11	5							
 <p>Reflect Q in the line $y = x$</p>								

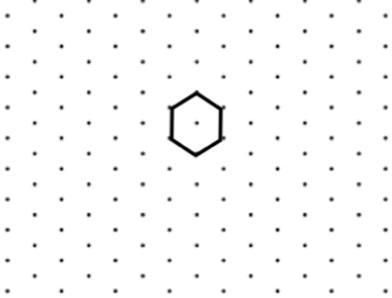
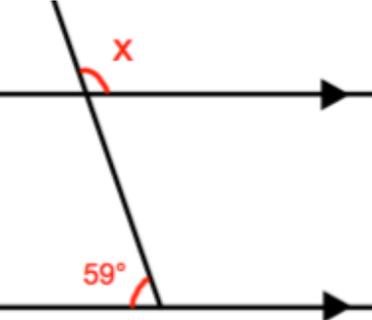
Name: _____

November 25	5-a-day	Foundation
<p>Factorise</p> $35y + 45$	<p>Expand and simplify</p> $(y + 4)(y - 3)$	
<p>k is odd.</p> $3k + 1$	<p>Tick the correct box</p> <p><input type="checkbox"/> odd <input type="checkbox"/> even <input type="checkbox"/> either</p>	
 <p>A right-angled triangle with vertices A, B, and C. The right angle is at vertex C. The base BC is labeled 24cm and the vertical side AC is labeled 10cm. The hypotenuse is AB.</p>	<p>Find the length of AB</p>	
 <p>A blue cylinder with a radius of 5cm and a height of 20cm. The radius is indicated by a red dotted line from the center of the top face to the edge, and the height is indicated by a red dotted vertical line.</p>	<p>Calculate the volume of the cylinder.</p>	
 <p>A regular pentagon with all sides and angles equal.</p>	<p>Shown is a regular pentagon.</p> <p>What is the size of each exterior angle?</p>	

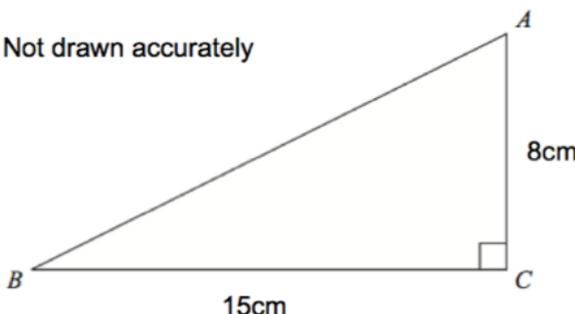
Name: _____

December 2	5-a-day	Foundation																																																							
<p>Write down Pythagoras' Theorem</p>	<p>Write down the formula for the area of a triangle</p>																																																								
	<p>Draw $y = 5$</p>																																																								
	<p>Draw $y = 5 - x$</p>																																																								
<table style="border-collapse: collapse; margin-left: 20px;"> <tr> <td style="border-right: 1px solid black; padding-right: 10px;">20</td> <td style="padding-right: 10px;">2</td> <td style="padding-right: 10px;">8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 10px;">21</td> <td style="padding-right: 10px;">0</td> <td style="padding-right: 10px;">3</td> <td style="padding-right: 10px;">6</td> <td style="padding-right: 10px;">6</td> <td style="padding-right: 10px;">6</td> <td style="padding-right: 10px;">8</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 10px;">22</td> <td style="padding-right: 10px;">0</td> <td style="padding-right: 10px;">1</td> <td style="padding-right: 10px;">1</td> <td style="padding-right: 10px;">2</td> <td style="padding-right: 10px;">4</td> <td style="padding-right: 10px;">6</td> <td style="padding-right: 10px;">6</td> <td style="padding-right: 10px;">7</td> <td style="padding-right: 10px;">8</td> <td style="padding-right: 10px;">8</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 10px;">23</td> <td style="padding-right: 10px;">0</td> <td style="padding-right: 10px;">1</td> <td style="padding-right: 10px;">2</td> <td style="padding-right: 10px;">5</td> <td style="padding-right: 10px;">6</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 10px;">24</td> <td style="padding-right: 10px;">0</td> <td style="padding-right: 10px;">3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p style="text-align: right; margin-top: 20px;">Key: 24 3 = 243</p>			20	2	8									21	0	3	6	6	6	8					22	0	1	1	2	4	6	6	7	8	8	23	0	1	2	5	6						24	0	3								
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<p>Calculate the median</p>	<p>What is the mode?</p>																																																								

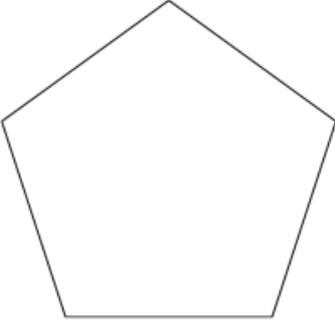
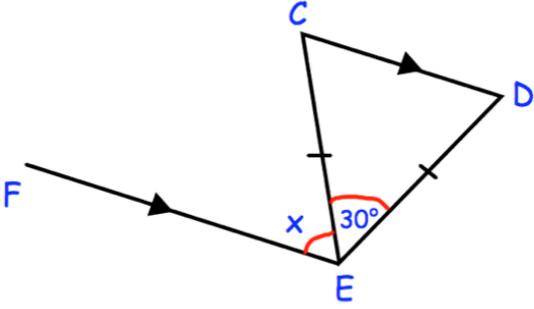
Name: _____

December 8	5-a-day	Foundation
		Show how the hexagon tessellates.
<p>20% of a number is 4.</p> <p>What is the number?</p>		<p>$\frac{2}{3}$ of a number is 12.</p> <p>What is the number?</p>
		Find the size of x.
<p>Samantha buys 24 stamps.</p> <p>The ratio of second class to first class is 3:5.</p> <p>How many second class stamps does Samantha have?</p>		
<p>Karl buys 89 apples which cost 21 pence each.</p> <p>Estimate the total cost of the apple.</p>		

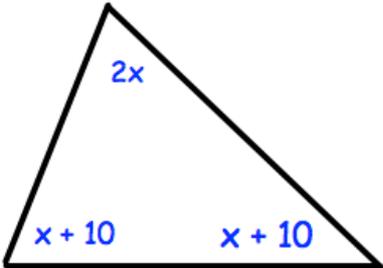
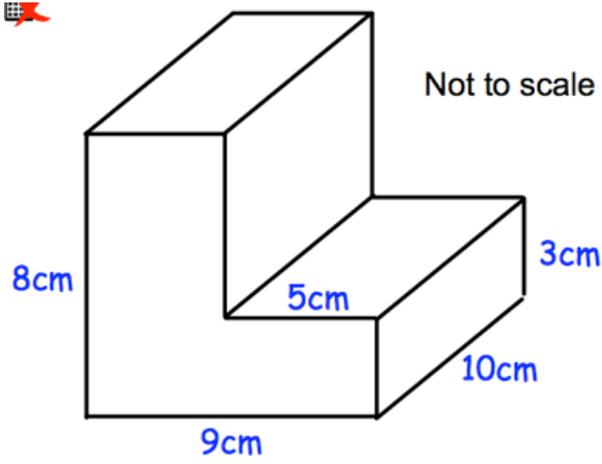
Name: _____

December 9	5-a-day	Foundation														
<p>\$1.50 = £1</p> <p>A pairs of trousers costs £20.</p> <p>Work out the cost in dollars.</p>																
<p>In a 90 minute football match, a team had 65% of possession.</p> <p>How many minutes possession is this?</p>																
<p>Age Frequency</p> <table data-bbox="207 1075 718 1276"> <tr> <td>$0 \leq a < 10$</td> <td>8</td> </tr> <tr> <td>$10 \leq a < 20$</td> <td>10</td> </tr> <tr> <td>$20 \leq a < 40$</td> <td>2</td> </tr> </table>	$0 \leq a < 10$	8	$10 \leq a < 20$	10	$20 \leq a < 40$	2	<p>Calculate the estimate mean</p>									
$0 \leq a < 10$	8															
$10 \leq a < 20$	10															
$20 \leq a < 40$	2															
<p>A dice is rolled 20 times. The scores are below. Complete the table</p> <p>2 2 1 5 5 6 3 2 3 4 1 1 6 4 1 5 1 1 4 1</p> <table border="1" data-bbox="172 1485 986 1641"> <tr> <td>Score</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <td>Relative frequency</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>			Score	1	2	3	4	5	6	Relative frequency						
Score	1	2	3	4	5	6										
Relative frequency																
<p>Not drawn accurately</p> 	<p>Find AB</p>															

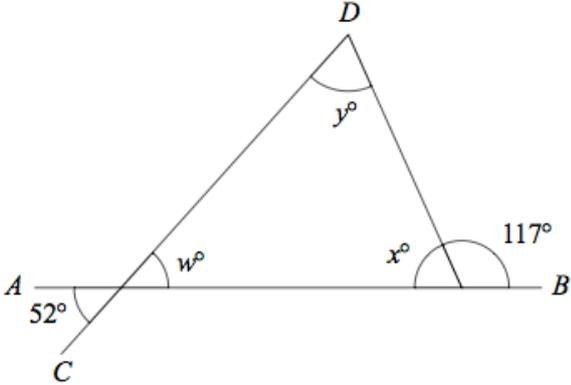
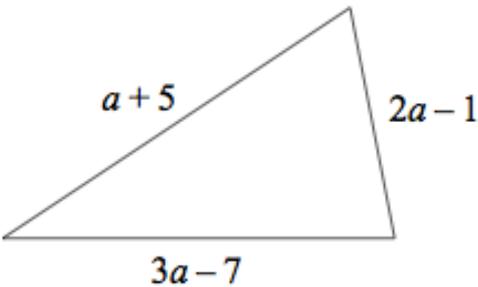
Name: _____

December 15	5-a-day	Foundation
<p>The nth term of a sequence is $n^2 + 3$</p> <p>Write down the first three terms.</p>	<p>Find the nth term of</p> <p>9 11 13 15 17 ...</p>	
	<p>What is the size of each interior angle of a regular pentagon.</p>	
<p>Write 42 as a product of prime factors.</p>		
	<p>Find x.</p>	
<p>Simplify</p> <p>$y^6 \times y^2$</p>	<p>Simplify</p> $\frac{w^4}{w^6}$	

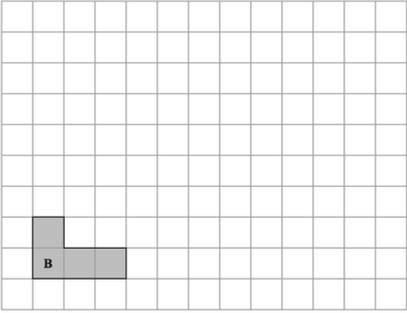
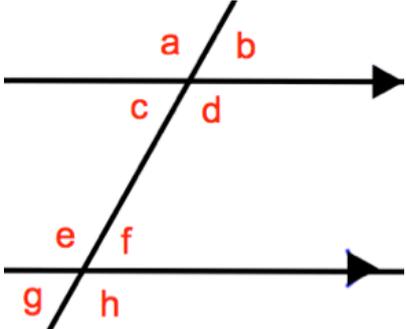
Name: _____

December 16	5-a-day	Foundation
<p>List the first 5 cube numbers.</p>		<p>List the first 5 prime numbers.</p>
<p>Using your calculator, work out:</p> $\frac{2.12 \times 5.2}{9.21 - 2.8}$		<p>Write out your entire calculator display.</p> <p>Round your answer to 2 significant figures.</p>
 <p>A triangle with three interior angles. The top angle is labeled $2x$. The two bottom angles are both labeled $x + 10$.</p>		<p>Write down the size of each angle</p>
 <p>Not to scale</p> <p>A 3D diagram of a stepped prism. The front-left vertical edge is labeled 8cm. The bottom-left horizontal edge is labeled 9cm. The bottom-right horizontal edge is labeled 5cm. The bottom-most horizontal edge is labeled 10cm. The right-most vertical edge is labeled 3cm. A small red icon is in the top left corner.</p>		<p>Find the volume of the prism.</p>

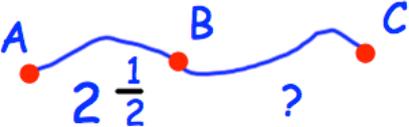
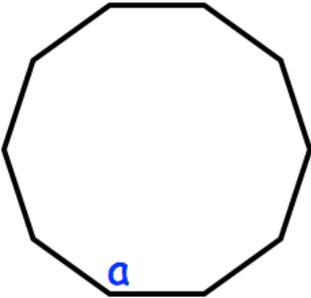
Name: _____

December 22	5-a-day	Foundation
 <p>Work out x</p>	Work out w	
	Work out y	
<p>$A = 5w - 2y$</p> <p>Work out the value of w when $A = 23$ and $y = 1$</p>		
	Write an expression for the perimeter of the triangle	
<p>The perimeter of the triangle is 21cm.</p> <p>Find a</p>		

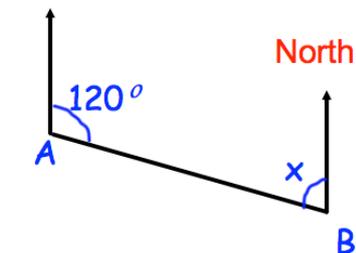
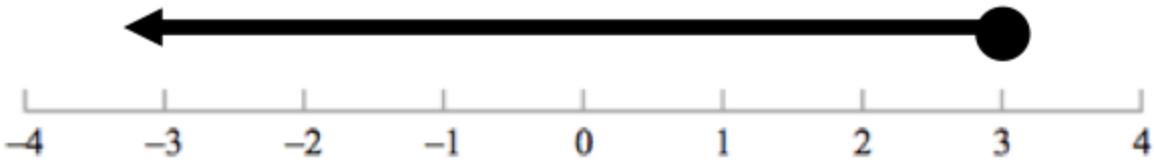
Name: _____

December 23	5-a-day	Foundation												
<p>Find the area of a circle with radius 8cm.</p>														
<p>Enlarge shape B by scale factor 2</p>														
	<p>Which angle is vertically opposite to h?</p> <p>Which angle is alternate to e?</p>													
<table border="1" data-bbox="172 1339 596 1637"> <thead> <tr> <th>Time (t minutes)</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>$0 < t \leq 6$</td> <td>15</td> </tr> <tr> <td>$6 < t \leq 12$</td> <td>25</td> </tr> <tr> <td>$12 < t \leq 18$</td> <td>20</td> </tr> <tr> <td>$18 < t \leq 24$</td> <td>12</td> </tr> <tr> <td>$24 < t \leq 30$</td> <td>8</td> </tr> </tbody> </table>			Time (t minutes)	Frequency	$0 < t \leq 6$	15	$6 < t \leq 12$	25	$12 < t \leq 18$	20	$18 < t \leq 24$	12	$24 < t \leq 30$	8
Time (t minutes)	Frequency													
$0 < t \leq 6$	15													
$6 < t \leq 12$	25													
$12 < t \leq 18$	20													
$18 < t \leq 24$	12													
$24 < t \leq 30$	8													
<p>Write down the modal interval</p>	<p>Calculate an estimate for the mean</p>													

Name: _____

December 29	5-a-day	Foundation
Simplify 15:10	Simplify 35:20	
Factorise $8y + 12w + 16s$		
 <p>The distance from A to C is $3\frac{2}{3}$ miles</p>	What is the distance from B to C?	
Expand and simplify $(y - 5)(y - 5)$		
	Shown is a regular decagon. Find the size of each interior angle	

Name: _____

December 30	5-a-day	Foundation
<p>Simplify</p> $x^3 + x^3$	<p>Simplify</p> $y^3 \times y^3$	
<p>North</p> 	<p>What is angle x?</p>	
<p>What is the bearing of B from A?</p>	<p>What is the bearing of A from B?</p>	
 <p>Write down the inequality shown above</p>		
<p>Find y</p>	